

MATERIAL SAFETY DATA SHEET

CHEMTREC # 1-800-424-9300 NATIONAL RESPONSE CENTER # 1-800-424-8802

Date: 3-14-04 Revision: B

1. PRODUCT IDENTIFICATION

Product Name: LB® loading medium (5X)

Catalog Numbers: LB5N-8, LB5N-50

Chemical Name: Aqueous solution of glycerol and boric acid, with lithium ion, sodium ion,

borate ion, sarcosine ion, and orange G ion as the major conductive species.

2. HAZARD IDENTIFICATION RATING SYSTEM

HEALTH: 1 Slight

FLAMMABILITY: 0 Nonflammable

REACTIVITY: 1 Slight CONTACT: 2 Moderate

3. PRECAUTIONS FOR SAFE HANDLING AND USE

May cause eye and skin irritation. During use, avoid contact with eyes, skin, and clothing.

Wear safety glasses, lab coat and gloves. Wash thoroughly after handling. When not in use, keep in tightly closed container.

4. <u>INGREDIENTS</u>

This product contains hazardous ingredients: Yes
This product contains carcinogens: No
This product is proprietary: Yes

Chemical Name	CAS#	W/v	%
Dilithium borate	12007-60-2	not more than 10 g/L	not more than 1.0
Boric Acid	10043-35-3	not more than 10 g/L	not more than 1.0
Glycerol	56-81-5		50
Sodium sarcosine	4316-73-8	not more than 5 g/L	not more than 0.5
Sodium orange G	1936-15-8	not more than 5 g/L	not more than 0.5
Water	7732-18-5	N/A	N/A

5. PHYSICAL DATA

Physical State: Liquid pH: 8.2

Appearance/Odor: Clear, colorless, odorless

Flash Point: N/A

6. FIRE AND EXPLOSION

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use extinguishing media appropriate to surrounding fire conditions.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May emit toxic fumes of boron oxides and lithium oxides under fire conditions.

7. HEALTH HAZARD INFORMATION

Lithium has nervous system toxicity. Signs and symptoms: large doses of lithium have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Borate solutions may cause acute or chronic irritation of skin, eyes and mucous membranes.

IN THE EVENT OF ANY CHEMICAL EXPOSURE, PLEASE SEEK MEDICAL ATTENTION

EMERGENCY AND FIRST AID PROCEDURES:

INGESTION: Repeatedly rinse mouth with water. Drink large quantities of

water. Get medical attention if irritation persists.

SKIN CONTACT: Immediately wash skin with soap and flush with large amounts

of water for at least 15 minutes. Get medical attention if

contact area remains irritated.

EYE CONTACT: Immediately flush eyes with large amounts of water for at least

15 minutes. Get medical attention if eye(s) remain irritated.

FOR EMERGENCY EXPOSURE INFORMATION: Call 1-800-424-8802 (Nat'l Response Center)

8. REACTIVITY DATA

Stable.

9. SPILL OR LEAK PROCEDURES

Wear protective clothing and safety glasses or goggles while cleaning up the spill. Minimize spread of liquid using appropriate absorbent material. Place in closed containers for disposal.

10. DISPOSAL PROCEDURES

Dispose of in accordance with all applicable Federal, State and Local environmental regulations.

11. SPECIAL PROTECTION INFORMATION

This product is for research use only. This product has not been approved for diagnostic or therapeutic use. Wear safety glasses, lab coat, and proper gloves.

12. SPECIAL PRECAUTIONS

STORAGE INFORMATION: Store in tightly closed container at room temperature or lower.

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